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ABSTRACT

The career ladder is an incentive plan widely considered in response to perceptions of decline in teaching effectiveness and as a method of employment retention. Organizational research demonstrates the importance of meaningful work and authority relationship factors in determining employee attitudes. This study examines effects of career ladders on teachers' work, careers, and relationships with principals. Field data were gathered in the Provo school district (Utah) after the first year of a career ladder plan. A survey instrument tested attitude interaction patterns emerging during implementation. Teachers were asked open ended questions. The final survey includes 51 declarative statements to which teachers responded by a Likert scale. Survey results indicate that teachers feel basically, but not overwhelmingly, positive about most aspects of career ladders. Groups of teachers differ in attitudes about job redesign features; for example, teachers able to make experiential comparisons feel the new process promotes collegiality. Plan implementation is a crucial stage because traditional egalitarian work norms and authority relationships are affected. Teachers, nonetheless, respond favorably to career ladder effects on their work. Because these data are pertinent to national debates about quality of work life policies, longitudinal and qualitative research methodologies are recommended. Eight tables summarize survey results. Forty references are included. (CJH)

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CAREER LADDER EFFECTS ON TEACHER ATTITUDES ABOUT TEACHER TASKS, CAREERS, AUTHORITY, AND SUPERVISION[1]

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In response to wide spread perceptions of a decline in the quality of the teaching force and disillusionment with teacher effectiveness, states are focusing on reforms offering incentives to attract and retain able people in the teaching profession and encourage teachers to improve their performance. The career ladder is among the incentive plans being widely considered. Career ladders can be a significant change in the way teaching work and careers are organized. Although forty states are developing, implementing, or considering career ladder structures, data collected across the country to date have been primarily limited to descriptions of career ladder plans, descriptions of teacher evaluation procedures used under the plans, and narratives from policy makers explaining their intent in establishing career ladders (Cornett & Weeks, 1985a, 1985b; Education Week, 1985; Educational Leadership, 1985). Recently, states have begun to gather opinion data from teachers on the implementation effects of career ladders and the level of teacher support for the reform (Nelson, 1986). Research in organizations indicates that job and professional norms, opportunities for growth and increased scope of influence across the work career, supervision structures, meaningful work, and leadership relationships play a role in the attitudes

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people have about their work and their decisions to remain in a job or career. People bring to their work certain personal needs that may determine to a large measure the incentives that may appeal to them (Derr, 1980, 1986; Hackman & Oldham, 1980; Hall, 1976; Kanter, 1977; Seybolt, 1980). The purpose of this study is to begin the necessary examination of the effect of career ladders on teachers, their work and careers, their opportunities for growth and power, and their relationships with principals.

In the past attempts to improve education by providing resources for the classroom teacher have emphasized support staff and supervisory roles differentiated from teaching. Perceived in education as promotions, this structure of jobs, along with administration, developed as the only career growth opportunities available to teachers (Hart & Murphy, forthcoming; Murphy & Hart, 1985). The current teacher career ladder movement is different. Based on a commitment to increase the quality of teaching in classrooms through the recruitment and retention of quality teachers and incentives for teachers to perform, it is an attempt to enhance the attractiveness and effectiveness of the teaching job rather than provide other job options in education. Explicitly or implicitly, career ladders are aimed at a target population--teachers and potential teachers who are academically able, seek opportunity to grow and progress, and might be most at risk of leaving (or not joining) the profession, because they have multiple options or career and growth needs not met by the current structure of teaching.

Teacher career ladders as job redesign provided the conceptual framework of the study. Teacher incentive programs that rename merit pay as career ladders were not included in the framework. Attempts to use career ladder reforms require explicit decisions about redesigning supervision, collegial

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and authority relationships, and compensation patterns in teaching jobs. Research in job redesign demonstrates that, even if individuals are dissatisfied with current work design patterns and think the reform is a good idea, they will often resist change and feel uncomfortable with the new patterns (Hackman & Oldham, 1980). Therefore, an examination of teacher responses to a redesign effort and or the differential responses by groups of teachers to features of the reform, is a prerequisite of assessments of teacher career ladder reform programs in the preliminary implementation stages.

While career ladder structures can address the needs of young adults entering the work force for challenging work, psychological involvement in work, feedback, and coaching from supervisors and experienced colleagues identified in psychological research, many challenges and obstacles lie in the way of the successful implementation of the reform (Hall, 1976; Murphy & Hart, 1985). The principal often functions in the role of gatekeeper in a school, playing a substantial role in any reform effort (Berman & McLaughlin, 1978). Other organizational variables of interest in career ladder reform rise from research on secondary and elementary schools (Boyer, 1983; Cusick, 1983; Sizer, 1985; Wolcott, 1973), from research on the evolving career needs of individuals across time (Derr, 1983; 1986), and from indications that the target population is at high risk of leaving before they accumulate long years of experience in the profession (Schlechty & Vance, 1981).

Additionally, field research completed in the Provo School District[2] during 1984-85, revealed patterns in authority, leadership, and substantive

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[2]The author wishes to thank the Board of Education, administration and teachers of the Provo School District, Provo, Utah for permission to use the name of the district in the report of this research.

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collegial interaction stimulated by career ladder implementation efforts suggested by research in other organizational settings (Blau, 1963; Dornbush & Scott, 1975; Hart, 1985). The emergence of work redesign and career factors during implementation of career ladders, teacher attitudes toward the reform, and the relationships between their emergence, interaction, and modification among groups of teachers is vital to better understand the structure of career ladder reforms and inform future policy decisions.

Method

Because career ladder reforms tend to emphasize merit/performance recognition or job enlargement features (though they often include both), a district with a job enlargement emphasis and promotional opportunities that has had a career ladder in place for a year was chosen for the study. The Provo District's career ladder includes three major components. Teacher leaders (approximately 10% of teachers in the district) are selected through an evaluation system and competition for leadership positions at the school level (a few at the district level) that include such responsibilities as instructional improvement, curriculum and program development, and serving as mentors and supervisors for novice teachers (1-3 year teachers are considered probationary in the district.). Job descriptions for these roles are developed at the school level. Teacher leaders are compensated by a stipend plus additional days of pay, often approaching full time work, at their professional daily contract rate. Teacher leader positions are automatically vacated every two years and leaders must reapply and compete for their positions. Teacher specialists (approximately 40% of teachers) are chosen for more narrowly defined roles, by competition and evaluation, and are

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compensated for their work with a stipend and a few extra days of pay at their contract rate. Teacher specialist positions are for one year. A performance bonus is also awarded to teachers through an evaluation system of direct classroom observation and clinical supervision, a feature implemented in the second year. As part of the career ladder, all teachers work additional contract days without students in the school, paid at their salary schedule rate.

Based on previous research, several hypotheses guided the study.

1. There will be a difference in attitudes about factors related to career ladders between career ladder teachers and nonparticipants in the career ladder.
2. There will be a difference in attitudes about factors related to career ladders between novice teachers, those in mid-career, and highly experienced teachers.
3. There will be a difference in attitudes about factors related to career ladders between elementary, junior high, and high school teachers.
4. Teachers will find the job redesign reform discomfiting.
5. Authority and supervision relationships will be affected by the career ladder job redesign.

Using theme and issue data from field research in the district during the first year of the career ladder and questions posed by research in job redesign, careers, and teaching as work, the researcher constructed a survey instrument designed to test attitude and interaction patterns emerging during the implementation of the career ladder (Hart, 1986; Hart, Kauchak, & Stevens, 1986). To establish content and construct validity, multiple sources were

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used. Three scholars currently working on career ladder research examined the instrument and revisions were made on their recommendations. The career ladder task force made up of one teacher from each school, the superintendent, and two principals, two additional principals, and representatives of the teachers association in the district then examined the instrument and made editorial suggestions. Open ended questions giving teachers the opportunity to supply data they saw as pertinent were added.

Reliability was determined by administering the instrument to a pilot sample of eleven (11) teachers in the district and then again after a period of several days. Test re-test reliability percentages were calculated to establish the consistency and stability of responses to the survey. The instrument had a test-retest reliability of 94.6% on individual items. Teachers in the pilot sample also offered several minor suggestions for wording of items.

The final survey included fifty-one (51) declarative statements to which teachers responded using a Likert scale from 1-5, with 1 meaning strongly disagree and five (5) meaning strongly agree. Thirty-six (36) of the items were answered by all teachers, six (6) items were answered only by probationary teachers, and nine (9) items were answered only by teacher leaders. Five open ended questions, described in the findings section below, were also asked.

The population and sample, for theoretical reasons and convenience, included all classroom teachers in the Provo School District. The unit of analyses were groups of teachers, depending on school level (elementary, junior high, high school), experience, and participation in the career ladder, and the district. The survey instrument was given to all teachers present

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during a regular faculty meeting in November, 1985 by each schools teacher association representative. Of 420 teachers in the district, 389 usable responses were collected, 92% of potential respondents. The return rate reflects the failure of teachers who were absent the day the survey was administered in the district and teachers who have the autumn cycle off in two year-round schools to complete the survey, as well as a small number of teachers who may have chosen not to return the survey. Of responding teachers 54 were teacher leaders, 137 were teacher specialists, and 198 were not on the ladder; 231 were elementary school teachers, 57 were junior high school teachers, and 101 were high school teachers; 109 had 1-3 years of experience, 124 had 4-10 years of experience, and 157 had over 10 years experience.

A factor analysis of responses on the first thirty-six items was performed to group items by work and career factors salient to the career ladder. Five major factors were isolated. Multivariate analysis of the standardized factor scores as dependent variables with a set alpha of .05 was performed to test for significance prior to the univariate analysis of variance to protect against compounding alpha. An analysis of variance was then performed on the data using experience, level, and career ladder participation as independent variables and the five standardized factor scores as dependent variables. An analysis of variance of the items completed by probationary teachers and teacher leaders was performed to determine differences in their responses by level. Scattergram tests for homogeneity of variance and tests for normal frequency distributions were performed for all five factors to and guard against violation of assumptions of analysis of variance (Scott, Carter, & Bryce, 1981). Factors explored included attitudes

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toward authority, supervision and oversight, careers, job tasks, and involvement in work.

Findings

The findings of the study will be presented in several sections--summary of themes found in the written responses, the factor analysis, the analysis of variance, and data description summaries on the 51 individual items.

Themes from Written Responses

Responses to the questions were first summarized into issue or task categories and then were collapsed into major themes. The number of comments offered in each theme is contained in Table I.

Question #1--Describe the influence you see teacher leaders having on other teachers in your school. Sixteen issue categories were identified by the first reading of the written responses. From these, six major themes emerged. They were: 1) professional development and mentor; 2) curriculum development; 3) instructional improvement; 4) school improvement and problem solving; 5) administration and organization; and 6) a negative influence on teachers. Of the comments offered 5% came from district teacher leaders, 36% came from teacher specialists, 17% came from teacher leaders, and 42% came from other teachers. All comments indicating that the extra preparation time for teacher leaders is a negative influence on the school came from career ladder teachers (5 teacher specialists and 3 teacher leaders) and one teacher specialist and one teacher said the teacher leaders have no influence because "even if you begged for [help] they won't give it". Only 2% of the open

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comments offered by teachers about the influence of teacher leaders on other teachers were negative.

Teachers in the district see the teacher leader role as the development of other teachers (mentors) and involvement in professional issues of curriculum and instruction. They perceive teacher leaders' work as extending beyond individual classroom and into the greater school environment, working for the improvement of the school as a whole with influence over all aspects of the school enterprise, including classroom and school discipline.

Question #2--On what aspects of the school program do the teacher leaders focus their efforts? What do they do? Fifteen issue categories were reduced to five aspects of the school program. They were: 1) program and curriculum development and coordination; 2) professional development/mentor; 3) school improvement; 4) administration and organization; and 5) doing their own thing. Of the total 452 comments offered by teachers, 5% came from district teacher leaders, 39% came from teacher specialists, 19% came from teacher leaders, and 37% came from other teachers. 00.7% of teachers commenting felt that teacher leaders "do their own thing". Another issue of concern to teachers in the district, administrative responsibilities (meetings, office duties, material resources, and class schedules) was mentioned by 17% of teachers who chose to comment (See Table I).

As in the responses to question #1, teachers saw the teacher leaders focusing their major efforts toward issues of curriculum, instruction, professional development, and school improvement. They mentioned a wide variety of activities within these categories, including school climate programs, discipline, in-service training, modeling, and curriculum development and coordination.

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Question #3--In what areas do the teacher specialists work? What do they do? Nine issue categories led to the development of six areas of emphasis in the work of teacher specialists in the district. Teachers felt that the teacher specialists worked in six main areas: 1) professional development and assistance, including workshops in specialty areas; 2) program and curriculum development; 3) administration and school organization, including communication; 4) research and diagnosis; 5) developing collegiality; and 6) special projects, programs, or activities. Excluding the list of curriculum specialty areas provided by teachers in response to this question, 6% of comments were offered by district teacher leaders, 52% of comments were offered by teacher specialists, 19% of comments were offered by teacher leaders, and 22% of comments were offered other teachers. No negative remarks were offered by teachers.

The vast majority of comments related to teacher specialists' work involved specific training and assistance in subject areas. When combined with curriculum and program development, the subject area/curriculum emphasis in the work of teacher specialists in the district is clear (See Table I).

Question #4--Describe the effect the career ladder has had on your working relationship with the principal of your school. Teachers choosing to respond to this question indicated: 1) they had developed a better working relationship; 2) there was no noticeable effect; and 3) the situation had deteriorated. Of those commenting, 2% were district teacher leaders, 29% were teacher specialists, 12% were teacher leaders, and 57% were other teachers. Total response of those choosing to comment indicated that 62% felt their relationship had improved, 34% felt there had been no change, and 3% felt the situation had deteriorated.

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General Comments--Anything you would like to share about career ladders. General comments were more negative than those given in response to particular questions. Some teachers commented that the their feelings had not been given a proper hearing (15% of teachers responding to the survey). Secondary teachers were concerned about the reliance on subject area divisions to determine what teacher leader positions are available, limiting access to those in less populated subject areas and making the process vulnerable to manipulation and power plays. Comments also indicated that resentment over reduced class teaching loads for teacher leaders persisted side by side with feelings on the part of teacher leaders that too much was expected of them, with negative consequences for their teaching.

However, career ladder teachers also commented that in-service had been helpful to them and that career ladder teachers took some responsibility for school-wide improvement. Other teachers commented that teacher leaders are capable teachers who are more than willing to assist when asked, and that many teachers have sought assistance. Open comments suggesting a desire to give the district feedback on career ladders in another form (not by survey) were offered by 59 teachers, 64 expressed dissatisfaction with some feature of career ladders or its implementation, and 21 offered strong praise for career ladders. Two teachers said they felt the survey did not give them the opportunity to express the strength of their support.

Factor Analysis

The factor analysis defined five career and work factors: 1) career ladder teacher tasks and impact; 2) teacher decision making authority; 3)

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career; 4) observation/evaluation; and 5) work engagement (See Tables II and III).

The first factor included questions relating directly to the selection, work, and impact of career ladder teachers in the district. Examples of questions whose variance was best explained by factor I include:

*The work of career ladder teachers improves the organization of my school.

*The work of career ladder teachers does not contributes to the quality of curriculum at my school.

*Teacher leaders in my school offer curriculum and lesson plan help to me.

*The work of career ladder teachers contributes to the quality of instruction in my school.

Teacher Decision Making Authority, factor II, and the factor describing attitudes toward Career, factor III, are salient to issues of power and opportunity. Examples of authority questions included:

*Principals would not give more freedom to make professional decisions for the school to experienced teachers who have demonstrated their skill and ability than they give to other teachers.

*If I knew that there were opportunities for me to have increasing authority and influence in a school over time I would be more likely to stay in teaching.

*As they develop professionally, teachers should gradually have more influence over professional decisions affecting the school.

Examples of career (factor III) questions included:

*The supervision of superior, experienced teachers should not be different than the supervision of new teachers.

*The teacher leader position should be permanent (except for dismissal for cause).

*The teacher specialists should not have to apply for their jobs every year.

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Observation/evaluation, factor IV, relates to the direct observation of instruction and attitudes about its usefulness and accuracy. Examples of questions in factor IV include:

*I don't like being observed while teaching.

*Peers should not be involved in the supervision of teachers.

*Classroom observation of teachers would yield different results if it were unannounced and unscheduled.

Work Engagement, factor V, reflects attitudes toward the career ladder influence in promoting a more professional and collegial atmosphere in the schools, a factor identified by research as more prevalent in schools identified as effective (Little, 1982). Some questions included in this factor were:

*We seem to talk about teaching and education in my school more than we used to.

*Clinical supervision by teacher leaders in my school emphasizes performance evaluation more than professional development.

*I would not be more likely to stay in teaching if I knew it was possible to make more money than I can on the salary schedule.

Analysis of Variance

Analysis of variance was used to test the major hypotheses of the study. Using standardized factor scores on the five factors as dependent variables, analysis of variance was performed with level, experience, and career ladder as independent variables. The results of the ANOVA can be found in Table II.

Additional analyses of variance were performed for the items to be completed by teacher leaders and probationary teachers using responses on each item as the dependent variable (See Tables IV and V). Elementary and secondary probationary teachers did not differ significantly in their responses, nor did teacher leaders by level, experience, or level by

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experience interaction. Their work with career ladders has been consistent throughout the district, a development of importance for district leaders and policymakers.

Career Ladder Teacher Tasks & Influence. Factor I reflects the level of involvement in supervision, curriculum, instructional development, and school discipline activities of teachers as part of the career ladder. Variance in attitudes about the quality of teachers on the ladder, the fairness of the selection process, and the visibility of career ladder teachers' work to the rest of the faculty was best explained by this factor. Teacher influence and authority in the school and the perceived impact of career ladder teachers on curriculum, student performance, and the quality of instruction in schools also are involved in this factor.

Attitudes about the tasks and influence of career ladder teachers in the schools are significantly different by experience and participation in the career ladder. Those teachers with more than 10 years of experience are much less positive about career ladder task and influence than are teachers with less experience. Teachers with 1-3 years of experience were the most positive about career ladder tasks and influence in the schools. Statistically significant differences exist between groups, $p=.002$. Those teachers who have spent less time in teaching assess the impact of career ladders on the schools more positively and were more likely to judge the quality and selection of career ladder teachers positively. However, probationary teachers were most divergent in their responses, showing a standard deviation of the mean over twice as large as teachers with more experience (See Table III).

Participation in the career ladder had a significant effect on attitudes toward the value and quality of the career ladder tasks and impact, $p=.025$.

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These differences existed between career ladder teachers and all other teachers (p=.011) and between teacher leaders and teacher specialists (p=.024). Teacher leaders, those most actively involved in career ladders, had the most positive attitudes and teachers with no involvement in the ladder had the most negative attitudes.

Teacher Decision Making Authority. This factor explored attitudes toward the opportunity for increasing influence over professional decisions in a school as teachers develop and demonstrate their abilities. Statistically significant differences on this factor were found only between elementary and secondary teachers (p=.021), with elementary teachers having significantly more positive attitudes toward growth opportunities in decision making authority in the school than all secondary teachers. Differences in the mean responses of teacher leaders, teacher specialists, and teachers not on the career ladder exist but were not statistically significant. Experience, the variable having such a strong influence over attitudes toward the career ladder tasks and impact, had no effect on attitudes toward teacher decision making authority opportunities.

Career. An arguments advanced for career ladders is the need for opportunities to plan career maps and advancement in order to entice teachers to stay in the profession and assure ambitious and talented young people that teaching will afford them advancement opportunities. Previous research on teacher career anchors indicates that difference exist in teachers career motivators (DeLong, 1984a, 1984b). Statistically significant differences in these attitudes exist between experience groups, with teachers with 4-10 years of experience having more positive attitudes toward the career opportunities provided by stable career ladder jobs and evolving supervisory systems

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(depending on experience and development). Statistically significant differences in attitudes toward the career component of the career ladder ($p=.052$) were found by level of experience.

Attitudes toward career opportunities also differ by participation in the career ladder. Statistically significant differences ($p=.021$) between teacher leaders and teacher specialists, with teacher leaders far less positive toward more permanent promotion than teacher specialists, were found. Teachers not participating in the career ladder and teacher specialists had no strong feelings toward the permanency of career ladder positions and changing supervisory structures.

Observation/evaluation. Only participation in the career ladder affected teachers' attitudes toward direct observation of teaching, the structure of observations, who will observe (such as peers), and compensation for being an outstanding teacher. Statistically significantly higher attitudes toward the observation/evaluation system were found among teacher leaders than among teacher specialists ($p=.010$) and teachers not on the ladder.

Career Ladders and Work Engagement. The weakest of the five factors, explaining less of the variance in responses for inclusive items than the other factors, work engagement--interaction on professional issues, relative emphasis on professional development in the school--as a dependent variable yielded no statistically significant differences by level, experience, or career ladder participation. Though these issues may affect effective schools, as the literature has suggested, they appear not to be influenced by career ladders in the subject district. Further refinement of questions more directly isolating this factor should be pursued.

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Other data from the factor analysis yielded differences among groups of teachers in the district. High school teachers had a broader divergence of opinion; elementary teachers were more homogenous. Inexperienced teachers, those with 1-3 years experience, were the most heterogeneous group by experience, while those with over 10 years of experience demonstrated the most agreement on all factors. Finally, teacher leaders tended to diverge most in their responses while teachers not on the career ladder were in the greatest agreement. Additionally, scattergrams of the residuals indicated that high school teachers with long experience were an identifiably negative group, though their attitudes were not sufficiently variant to stand tests of statistical significance.[3]

Discussion

Data examining the quality of the teaching force and predicting serious shortages of teachers in the future led to calls for reform in the structure of teaching (Holmes Group, 1985; Schlechty & Vance, 1981). The target population, those still in early career who are at greatest risk of leaving teaching, are most positive toward the tasks and influence in the schools encompassed in the subject district's model of job enlargement career ladders. Those in early mid-career are significantly more positive toward both career ladder tasks and impact and the career planning factor.

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[3]The negative response of high school teachers to the career ladder was also observed in data from a recent opinion survey in one state. Nelson (1986) observed significant differences between high school teachers and other groups.

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Multivariate Analysis

While job redesign research indicates that involvement, positive attitudes, and satisfaction improve with job redesign, it often records a drop in satisfaction and production immediately after implementation and before the new structures of work and supervisory relationships are firmly established (Buchanan, 1979; Hackman & Oldham, 1980). The results of this study support the observation that those most involved and, therefore, most familiar with the new processes and relationships are most positive in their assessment of their potential impact on schools and the teaching career. For career ladder teacher tasks and influence in the school, both experience and career ladder participation affect the attitudes of teachers toward career ladder. Only level was found to be insignificant. As a preliminary assessment of the promise of a job enlargement career ladder for the retention of teachers and for its engagement and development of those most involved, these results are sanguine.

Teachers' decision-making authority in the school, developing across time with demonstrated skill and ability, was affirmed by the positive responses of teachers in all groups. Models of differing or changing views of teaching work and their analogous relationship with other work endeavors demonstrate how differently it is possible to structure teaching; the impact on the school, principal leadership, and supervision structures cannot be understated (Mitchell & Kerchner, 1983; Murphy & Hart, 1985; Stein, 1977). However, only school level significantly affected teachers attitudes by group. The reasons for this difference are not revealed by the data.

If teaching is to become a life-long career for more people, the differences among teachers on level of experience revealed by the data in this

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study are evidence that a career ladder can have some effect. Those who are most likely to be examining their career choice and re-evaluating teaching as a career, teachers with less than ten (10) years of experience, are positively influenced by career planning, stability of progress, and evolving supervision structures. The negative response of teacher leaders as a group to features of permanency for promotions may stem from a variety of factors. First, teacher leaders are under great pressure to perform in highly visible, unique roles. In a work culture where isolation often describes the work rather than autonomy in professional diagnosis and decision making rather than consultation and collegiality and egalitarianism often defines justice and fairness, they are an open affront to the norm, functioning in hierarchical positions as mentors, peer supervisors, and leaders (Malen & Murphy, 1986). In many ways teacher leaders are out on the polar ice cap inventing their roles. They are adamant that they must avoid accusations of free loading and monopolizing job opportunities--dead wood. They would rather compete regularly to retain their positions than suffer the criticisms of other teachers.

Though the decision was made to define the level of significance at .05, experience approaches significance ($p=.085$) in its influence on teacher engagement, collegiality, and professionalism. Increasing as experience increased, assessment of the first year of career ladders as positively influencing the level of engagement and interaction between professionals in the school by teachers in the subject district is a positive sign. Additionally, 62% of comments about career ladder effects on teachers' working relationships with principals indicated that they had improved. These results indicate a need for more carefully refined examination of the impact of job

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redesign structures on collegiality and professional interaction in school faculties.

Open-ended Comments

Early data from state and district assessments of the specific tasks and features of career ladders on direct questions appears far more positive in tone than the serious discomfort and agitation with career ladder reforms reported by many teachers. The 15% of teachers responding to the survey who said they were not being given the opportunity to express their feelings in response to a question that asked them to say anything [emphasis in the original] they wanted to about the career ladder illustrate this discomfort. The irony of this set of responses may be explained by the research on job redesign, which predicts strains resulting merely from the change in work structures and relationships. Small, incremental adjustments to patterns familiar in the old work structure and authority relationships to which people are accustomed are observed in managers and those whose work is redesigned. The result is often described as the vanishing effect (Hackman & Oldham, 1980). A displaced sense of foreboding or discomfort that cannot be attributed by respondents to specific career ladder tasks, features, or failure to produce results may be manifested in this data.

Descriptive Statistics

Attitudes about specific features of the career ladder model and participation in it can be explored through mean responses of all teachers to individual items. This district level analysis, along with the summaries of responses to open-ended questions, provides insight into specific patterns

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developing in the district. Table VI summarizes the responses of teachers in the district and the issue confronted by each item. Table VII gives the number and percentage of teachers responding in each category for each item. Table VIII separates the responses found in Table VII by groups of teachers.

When the responses of probationary teachers and teacher leaders are examined, it is clear that those whose roles are defined as the receivers and givers of assistance with instruction, discipline, and curriculum both offer and ask for help a moderate amount. These activities take many forms, but modeling of instructional techniques was the most common activity engaged in by teacher leaders. These data support a feature of the district's efforts--an instructional improvement effort stretching back over the last five years and emphasis on modeling of instructional techniques in the job descriptions of teacher leaders.

Responses on the remaining questions for all teachers demonstrate a generally positive attitude toward specific aspects of career ladders in the district. The following discussion will center on items about which the teachers feel most strongly.

Career Opportunities--stability v access. For two years the relative advantages of permanence for career ladder positions in the district have been debated. In this survey the teachers rejected stability in favor of a concept of broad access. They also question whether the teacher specialist role as now organized provides a substantial career change or opportunity for the teachers holding those positions, a result which may explain the significantly stronger level of affirmation of career ladder tasks, impact, and peer supervision by teacher leaders.

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Teacher Leader Involvement in Management and Administrative as Opposed to Instructional Improvement Duties. Responses to two items on the instrument indicate a potential source of frustration. While teachers generally responded that teacher leaders spend more time on management chores than on instructional improvement, when asked to list the activities teacher leaders are involved in they administrative and organizational chores were far down the list; they also felt that career ladder teachers' work does not necessarily contribute much to the school organization. On the other hand, teachers indicated support for the idea that career ladder teachers are contributing to efforts to improve student performance, the quality of instruction in schools, and the quality of curriculum. The visibility of teacher leaders' work was an issue in some schools. However, in the district as a whole, teachers felt that they could tell what the teacher leaders were doing. Teachers, particularly more experienced teachers, generally indicated that interaction among faculty members on professional issues had increased. Recognition of the complexity of factors contributing to student performance measures was reflected in teachers rejection of the use of student performance measures for the evaluation of teachers.

The Instructional Leadership Role of the Principal--Contrary to the predictions of many studies, the district's teacher leaders and probationary teachers had no strong feelings about teacher leaders' ability to serve as mentors, provide instructional assistance, and otherwise promote the development of probationary teachers compared with the ability of principals to accomplish the same tasks. Principals were seen as equally able. The support of probationary teachers and teacher leaders for the supervisory and instructional skills of teacher leaders affirmed both the perceived quality of

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the teacher leaders and the quality of skills possessed by principals in the district, who were seen as contributing equally to the professional development of probationary teachers. Teachers in the district describe the principals as giving substantive decision making authority to teacher leaders. Additionally, teachers indicated that the process by which teachers were selected for career ladder positions was perceived as basically fair and objective.

Teacher Influence. In addition to their belief that principals were sharing decision making authority with teacher leaders under the career ladder, teachers felt that they should be able to have more influence over professional decisions in a school as they develop and demonstrate skill. They also supported the notion that proven and able teachers should have more professional freedom than teachers in earlier stages of development, a feature of career trajectories, and could be promoted to positions of authority over other teachers.

Supervision. An important feature of professional work is a gradually evolving supervision structure that changes as professional growth is demonstrated (Mitchell & Kerchner, 1983). Teachers in the district supported the concept that supervision should be different for superior, experienced teachers than for novices in the profession. Support existed for the specific method of direct classroom observation in use in the district. Teachers showed no wide spread anxiety about being observed while teaching, expressed no qualms about the accuracy of the information gathered during direct observation, felt that professional development and evaluation were balanced in emphasis, and expressed no strong feelings about the possible effect of unannounced observations on the outcome of the observation.

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Retention and Recruitment Potential of Career Ladders. Overall, teachers in the district had no strong feelings about the influence of career ladder features on their potential decisions to remain in teaching. Positive toward the concept of paying the best teachers for what they now do, teachers' responses may have indicated the strength of a career ladder with a variety of features that include both additional responsibilities and merit awards. However, the analysis of variance indicated that the target population is more responsive to the career features of career ladders.

Summary

The results of the survey indicate that teachers in the district generally are coming along with the career ladder job redesign. Their attitudes are normally distributed on all five factors identified in the survey; they feel basically, though not overwhelming, positive about most aspects of career ladders. There is neither a groundswell of support for career ladders nor a wholesale rejection of the concept at this time. The survey results also indicate that groups of teachers differ significantly in their attitudes about career ladder job redesign features.

Indications that teachers most likely to have other experiences to compare with the new structure feel the process promotes engagement and collegiality, that teachers most at risk of leaving the profession are significantly more positive in their responses to the influence of career ladders and career planning features, and that teachers most involved in career ladder work interpret instructional improvement efforts, curriculum and program development, and student achievement effects positively exist in the

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data. The career ladder examined in this study had only been in place for one full school year when data was collected. The results indicate that job enlargement career ladder job redesign has potential for accomplishing many stated goals of the reform.

Field research data indicate that the implementation stage of career ladder reforms is the most critical (Hart, 1986; Malen & Murphy, 1986; Murphy & Hart, 1985). It affects egalitarian work norms long established in teaching; it erodes the work isolation identified as both dysfunctional and comfortable in research on teachers; it is highly vulnerable to the understanding and leadership of the school principal; it can alter authority relationships in schools. A great deal of time and effort is required to accomplish a work redesign effort. When such a reform is attempted for an entire profession and through public policy, the challenges are tremendous. Debates about the appropriateness of quality of work life policies in the culture as a whole have raged for some time (Work in America, 1980; Ginzberg, 1975). However, the teachers in the study responded to career ladder effects on their work with relative calm. Average attitudes about features of work, career, and authority currently affected by the career ladder reform in the district were moderate. The form of opinion survey under structured circumstances may have promoted a more moderate response, making it critical that in depth case study data be collected and compared with the survey data for a more rich view of teacher responses.

The teacher career ladder reform movement must be prepared to respond with assessments of its effectiveness in achieving stated goals, with rich school level data about its impact on the working relationships and tasks of teachers and principals, with evidence of its differential impact on various

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groups, and with substantive alternative structures and modifications as the implementation process proceeds. Studies examining the impact of the career ladder on career choices and attitudes of early career stage teachers identified as high potential by their academic records, ACT scores on entering college, and principal reports are currently being undertaken by the author and a colleague to further assess the reform's impact on the expressed target population. Studies of the long term effect of the reform (if it can survive the vicissitudes of public policy) on young people's career choices should also be begun. Such data are required to combat temptations to assess the outcome of career ladder job redesign efforts with inappropriate measures lacking descriptive and explanatory value.[4] Longitudinal system and group level measures along with detailed descriptions of work life in schools are called for.

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[4]The temptation in public policy reforms may be to seek immediate outcome data using easily collected measures in order to support (or scuttle) the reform. In the case of career ladders, many people are suggesting the use of individually measured standardized test scores whose reliability and validity when aggregated to the school and district level is challenged. See Peterson (1984) and Bidwell and Kasarda (1980).

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References

Berman, P., & McLaughlin, M. W. (1978). Federal Programs Supporting Educational Change, Vol. VIII: Implementing and Sustaining Innovations. Santa Monica CA: Rand.

Bidwell, C. E., & Kasarda, J. D. (1980). Conceptualizing and measuring the effects of school and schooling. American Journal of Education, 88, 401-430.

Blau, P. M. (1963). The Dynamics of Bureaucracy. Chicago: University of Chicago Press.

Boyer, E. L. (1983). High School: A Report on Secondary Education in America. New York: Harper & Row.

Buchanan, D. A. (1979). The Development of Job Design Theories and Techniques. Westmead, England: Saxon House.

Cornett, L., & Weeks, K. (1985). Planning Career Ladders: Lessons from the States. Atlanta, GA: Career Ladder Clearinghouse.

Cornett, L., & Weeks, K. (1985). Career Ladder Plans: Trends and Emerging Issues--1985. Atlanta, GA: Career Ladder Clearinghouse.

Cusick, P. (1983). The Egalitarian Ideal and the American High School. New York: Longman.

DeLong, T. (1984a). A comparison of the career orientations of rural and urban educations. Educational Review, 26.

DeLong, T. (1984b). Differences in career orientations of urban teachers: A multi-dimensional approach. Career Planning and Adult Development Journal, April.

Education Week. (1985, February). Changing course: A 50-state survey of reform measures, 4 (20), 11-30.

Educational Leadership. (1985, November). Special issue. Making teaching more rewarding, 43 (3).

Derr, C. B. (1986). Managing the New Careerist. San Francisco: Jossey-Bass.

Derr, C. B. (1980). More about career anchors. In C. B. Derr (Ed.), Work Family and the Career: New Frontiers in Theory and Research. New York: Praeger Publishers.

Dornbush, S. M., & Scott, W. R. (1975). Evaluation and the Exercise of Authority. San FRancisco: Jossey-Bass.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Ginzberg (1975). Work structuring and manpower realities. In L. E. David & A. B. Cherns (Eds.) The Quality of Working Life, Vol. 1. New York: The Free Press, pp 368-377.

Hackman, J. R. & Oldham, G. R. (1980). Work Redesign. Reading, MA: Addison-Wesley Publishing Company.

Hall, D. T. (1976). Careers in Organizations. Pacific Palisades, CA: Goodyear Publishing Company, Inc.

Hart, A. W. (1985). Formal Teacher Supervision by Teachers in a Career Ladder. A paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois.

Hart, A. W. (1986). Redesigning a Career: Two Comparative Case Studies. A paper presented at the annual meeting of the American Educational Research Association, San Francisco, California.

Hart, A. W., Kauchak, D., & Stevens, D. (1986). Teacher Career Ladder Effects on the Work of the Principal. A paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Hart, A. W., & Murphy, M. J. (forthcoming). Career ladders and performance appraisal. The National Forum.

Holmes Group--Wingspread. (4 June 1985). New goals and initiatives for teacher education recommended by Holmes Group Consortium. News release. Racine, Wisconsin: The Johnson Foundation, Inc.

Kanter, R. M. (1977). Men and Women of the Corporation. New York: Basic Books Inc., Publishers.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. American Educational REsearch Journal, 19, 324-340.

Lortie, D. C. (1975). School Teacher: A Sociological Study. Chicago: University of Chicago Press.

Malen, B, & Murphy, M. J. (1986 forthcoming). A statewide decentralized approach to public school reform: The case of career ladders in Utah. Journal of Education Finance, 11 (2).

Mitchell, D. E., & Kerchner, C. T. (1983). Labor relations and teacher policy. In L. S. Schulman and G. Sykes (Eds.). Handbook of Teaching and Policy. New York: Longman, pp. 214-238.

Murphy, M. J., & Hart, A. W. (1985). Career Ladder Reforms. A paper prepared for the California Commission on the Teaching Professions.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Nelson, D. (1986, January). A Statewide Survey of Teacher Opinions Concerning Utah's Career Ladder Program. Salt Lake City, Utah: Utah State Office of Education.

Peterson, K. (1984). Methodological problems in teacher evaluation. Journal of Research and Development in Education, 17, 62-70.

Peterson, K., & Kauchak, D. (1985). Methodological problems in career ladder evaluations. A paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois.

Rosenholtz, S. J., & Smylie, M. A. (1984). Teacher compensation and career ladders. The Elementary School Journal, 83, 149-166.

Scott, D. T., Carter, M. W., & Bryce, G. R. (1981). Rummage II. Provo, UT: Brigham Young University.

Seybolt, J. W. (1980). The impact of work role design on career satisfaction. In C. B. Derr (Ed.), Work, family, and the career: New frontiers in theory and research. New York: Praeger Publishers.

Sizer, T. R. (1985). Horace's Compromise: The Dilemma of the American High School. Boston: Houghton Mifflin Company.

Schlechty, P. C., & Vance, V. S. (1981). Do academically able teachers leave education? The North Carolina Case. Phi Delta Kappan, 63, 106-112.

Stein, L. (Ed.) Work or Labor. New york: Arno Press.

Wolcott, H. F. (1973). The Man in the Principal's Office. New York: Holt, Rinehart and Winston, Inc.

Work in America Institute Studies in Productivity (1980). Participative Management. New York: Pergamnon Press.

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TABLE I
Summary of Written Comments

Percent of total rounded to the nearest percent.
T = teacher
DL = district teacher leader
TL = teacher leader
TS = teacher specialist

#1: Influence of teacher leaders on other teachers:

Category	N	% of those choosing to comment
professional development and mentor	225	54
curriculum development	48	12
instructional improvement	58	14
school improvement	48	12
administration and organization	28	7
negative	10	2

Percent (%) of Teachers Responding by Career Ladder Participation

T	DL	TL	TS
42	5	17	36

#2: Teacher leader activities in the school:

Category	N	% of those choosing to comment
program and curriculum development and coordination	109	24
professional development/mentor	116	26
school improvement	101	22
administration & organization	75	17
their own thing	3	1

Percent (%) of Teachers Responding by Career Ladder Participation

T	DL	TL	TS
37	5	19	39

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#3: Teacher specialist activities in the school:

Category	N	% of those choosing to comment
professional development & assistance	551	77
program and curriculum development	91	13
administration & organization	40	6
diagnosis & research	8	2
collegiality	4	1

Percent (%) of Teachers Responding by Career Ladder Participation

T	DL	TL	TS
22	6	19	52

#4: Career Ladder Effect of Teacher/Principal Relationship

Category	N	% of those choosing to comment
improved	147	62
no effect	81	34
deteriorated	8	3

#5: Responses to Request for Other Reactions or Comments

Category	N	% of those choosing to comment
desire to offer different feedback on the career ladder	59	41
negative (TLs not the best, anger)	3	2
support for TL capabilities	14	10
discontent with access to ladder positions	8	6
work load for TLs	15	11
too light	5	4
too heavy	5	4
no accountability for what they do	2	1
more help for probationary & floundering Ts	3	2
more extra days	10	7
prefer specialists to career ladders	2	1
praise for CL concept/effect	4	3
praise for TL in-service	3	2
lack of questions about job descriptions	1	1
concern over TL training for evaluation	6	4
communication gap	6	4
TLs doing too much administrative work	11	8

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TABLE II
Analysis of Variance on Five Factors

Factor	Source	df	MS	F	p
1	Level	2	.514	.607	.546
	El vs Sec	1	.780	.922	.338
CAREER LADDER	Jr vs Sr	1	.195	.230	.632
TEACHER	Experience	2	5.230	6.176	.002***
TASKS &	1-3 vs others	1	2.227	2.630	.106
INFLUENCE	4-10 vs over 10	1	8.522	5.169	.002***
	Career Ladder	2	3.192	3.770	.025**
	TL & TS vs None	1	5.636	6.656	.011***
	TL vs TS	1	4.377	5.169	.024**
	Error	227	.847		
2	Level	2	2.533	2.683	.071
	El vs Sec	1	5.065	5.365	.021**
TEACHER	Jr vs Sr	1	.012	.013	.909
DECISION MAKING	Experience	2	.038	.041	.960
AUTHORITY	1-3 vs others	1	.045	.048	.827
	4-10 vs over 10	1	.035	.037	.849
	Career Ladder	2	.791	.838	.434
	TL & TS vs None	1	.895	.014	.905
	Error	227	.944		
3	Level	2	2.120	2.184	.144
	El vs Sec	1	1.648	1.699	.194
CAREER	Jr vs Sr	1	2.328	2.399	.123
	Experience	2	2.912	3.001	.052**
	1-3 vs others	1	2.486	2.561	.111
	4-10 vs over 10	1	3.138	3.234	.073
	Career Ladder	2	2.854	2.941	.055*
	TL & TS vs None	1	3.567	3.676	.056*
	TL vs TS	1	5.255	5.415	.021*
	Error	227	.970		

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4	Level	2	1.432	1.552	.214
	El vs Sec	1	1.535	1.250	.265
OBSERVATION/	Jr vs Sr	1	1.884	2.043	.154
EVALUATION					
	Experience	2	.027	.027	.971
	1-3 vs others	1	.051	.055	.815
	4-10 vs over 10	1	.002	.002	.962
	Career Ladder	2	3.086	3.345	.037**
	TS & TL vs None	1	1.744	1.891	.170
	TS vs TL	1	6.145	6.661	.010***
	Error	227	.922		
5	Level	2	.812	.812	.445
	El vs Sec	1	.819	.820	.366
CAREER	Jr vs Sr	1	.906	.907	.342
LADDERS					
AND	Experience	2	1.773	1.775	.172+
WORK	1-3 vs others	1	2.988	2.992	.085*
ENGAGEMENT	4-10 vs over 10	1	.650	.651	.421
	Career Ladder	2	.403	.403	.668
	TL & TS vs None	1	.002	.002	.966
	TL vs TS	1	.565	.566	.453
	Error	227	.999		

*** p .01
** p .05
* p .10
+ p nearing significance

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TABLE III
Responses by Source--Mean*

Factor Deviation	Source	N	Mean*	Standard of the mean
1	Career Ladder			
	leader	35	.624	.283
CAREER	specialist	93	-.070	.127
LADDER	none	118	-.188	.103
TEACHER				
TASKS &	Level			
INFLUENCE	Elem	133	.220	.108
	Jr High	39	.015	.179
	Sr High	74	.130	.198
	Experience			
	1-3 yrs	73	.435	.282
	4-10 yrs	77	.243	.139
	over 10 yrs	96	-.313	.115
2	Career Ladder			
	leader	35	.624	.283
TEACHER	specialist	93	.055	.134
DECISION	none	118	-.149	.109
MAKING				
AUTHORITY	Level			
(over time)	Elem	133	.225	.114
	Jr High	39	-.137	.189
	Sr High	74	-.166	.209
	Experience			
	1-3 yrs	73	.019	.298
	4-10 yrs	77	-.030	.139
	over 10 yrs	96	-.066	.121
3	Career Ladder			
	leader	35	-.749	.303
CAREER	specialist	93	.011	.135
	none	118	.001	.110
	Level			
	Elem	133	-.102	.116
	Jr High	39	-.515	.191
	Sr High	74	-.119	.212
	Experience			
	1-3 yrs	73	-.576	.302
	4-10	77	.089	.141
	over 10 yrs	96	-.249	.123

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4	Career Ladder			
	leader	35	.619	.296
OBSERVATION/	specialist	93	-.203	.132
EVALUATION	none	118	-.051	.107
	Level			
	Elem	133	.002	.113
	Jr High	39	.004	.186
	Sr High	74	.359	.207
	Experience			
	1-3 yrs	73	.074	.294
	4-10 yrs	77	.150	.138
	over 10 yrs	96	.141	.120
5	Career Ladders			
	leaders	35	-.164	.308
CAREER	specialists	93	.085	.137
LADDERS	none	118	-.031	.118
AND				
WORK	Level			
ENGAGEMENT	Elem	133	.064	.117
	Jr High	39	.037	.194
	Sr High	74	-.210	.215
	Experience			
	1-3 yrs	73	-.040	.306
	4-10 yrs	77	.068	.143
	over 10 yrs	96	.222	.125

*Mean squares used in the standard deviation has 227 degrees of freedom.
Means expressed as standardized factor scores.

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TABLE IV
Analysis of Variance
Probationary Teachers--Items 37-42

Item	Source	df	MS	F	p
37	Level	2	1.513	1.135	.326
	Error	90	1.333		
38	Level	2	1.098	1.304	.277
	Error	84	.842		
39	Level	2	.934	.663	.518
	Error	89	1.409		
40	Level	2	.162	.127	.881
	Error	90	1.275		
41	Level	2	.400	.435	.649
	Error	88	.920		
42	Level	2	1.390	1.579	.212
	Error	1	.861		

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TABLE V
Analysis of Variance
Teacher Leaders--Items 43-51

Item	Source	df	MS	F	p
43	Level	2	.088	.096	.909
	Experience	1	1.055	1.155	.289
	Level & Exp	2	.897	.781	.384
	Error	39	.917		
44	Level	2	1.174	1.434	.250
	Experience	1	1.478	1.805	.184
	Level & Exp	2	.045	.055	.946
	Error	40	.819		
45	Level	2	.735	1.221	.307
	Experience	1	.000	.000	.995
	Level & Exp	2	.027	.044	.957
	Error	36	.602		
46	Level	2	1.308	1.156	.325
	Experience	1	.499	.441	.511
	Level & Exp	2	1.246	1.101	.343
	Error	38	1.131		
47	Level	2	1.442	1.698	.196
	Experience	1	2.803	3.303	.077
	Level & Exp	2	.458	.540	.587
	Error	39	.849		
48	Level	2	.464	.429	.654
	Experience	1	.152	.141	.710
	Level & Exp	2	.822	.760	.475
	Error	37	1.081		
49	Level	2	.827	.991	.380
	Experience	1	.073	.088	.769
	Level & Exp	2	.476	.571	.569
	Error	40	.834		
50	Level	2	2.990	2.245	.119
	Experience	1	.665	.498	.484
	Level & Exp	1	.789	.592	.558
	Error	40	1.333		
51	Level	2	.256	.171	.844
	Experience	1	.171	.114	.738
	Level & Exp	2	.094	.063	.939
	Error	39	1.498		

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TABLE VI
Response by Item--Mean

Response categories items 1-7: 1--never; 2--seldom; 3--sometimes; 4--often; 5--very often

*Items originally phrased in the negative; scores reversed to calculate means.

Item	Mean	Issue
1	2.47	teachers approach teacher leaders for classroom management assistance
2	2.74	teachers approach teacher leaders for information about curriculum or lessons
3	2.45	teachers approach teacher leaders about teaching techniques
4	2.63	teacher leaders offer assistance with classroom management
5	2.81	teacher leaders offer help with curriculum and lesson plans
6	2.75	teacher leaders offer information about teaching techniques
7	2.93	teacher leaders model instructional techniques
Response categories items 8-51: 1--strongly disagree; 2--disagree; 3--no strong feelings; 4--agree; 5--strongly agree		
8*	3.26	attitudes about being observed while teaching
9	3.37	direct observation can give an accurate picture
10	3.48	usefulness of information teacher leaders have shared with the entire faculty
11*	3.52	teachers can tell what the teacher leaders are doing
12*	3.50	teacher leaders have more authority and influence in the school
13	3.14	more likely to stay in teaching if opportunities for growing authority and influence available
14*	3.24	teachers should be promoted to authority over other teachers

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15	3.94	teachers should gradually have more influence over professional decisions affecting the school as they develop professionally
16*	3.41	superior, experienced teachers should be supervised differently than new teachers
17*	2.77	the teacher specialist role is a substantial career opportunity
18	3.19	additional contract days for all teachers can exist independent of career ladders
19*	3.20	teachers more likely to stay in teaching if they could earn money over and above the uniform salary scale
20	3.94	principal shares decision making authority with the teacher leaders
21*	3.58	principals should give more professional freedom to proven, able, and skillful teachers
22	2.69	student performance can be used to evaluate teachers
23*	3.15	peers should be involved in the supervision of teachers
24	3.63	talking about teaching and education in the schools more than they used to
25	3.54	the best teachers should be paid more for what they do now
26*	3.10	teacher leader clinical supervision emphasizes profession development more than evaluation
27*	2.83	teacher leaders spend more time on instructional improvement tasks than on management chores
28*	3.62	career ladder teachers work contributes to efforts to improve student achievement
29	2.88	career ladder teachers work contributes to school organization
30	3.78	career ladder teachers work contributes to the quality of instruction in the schools
31*	3.86	career ladder teachers work contributes to the quality of curriculum in the schools
32	3.60	high quality teachers are getting career ladder positions
33	1.93	teacher leader position should be permanent
34	2.40	teacher specialists should not have to apply every year

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35	3.69	the selection process for career ladder teachers was fair and objective
36*	2.98	unannounced classroom observations would not yield different results

The following questions were answered only by probationary teachers.

37*	3.65	direct observation by teacher leaders does not bother probationary teachers
38	3.58	teacher leaders accurately reflect the teaching and lessons during post-observation conferences
39	3.02	teacher leaders are more help to probationary teachers than the principal
40	3.08	probationary teachers would like the teacher leaders to observe them more often
41	3.53	working relationships between probationary teachers and teacher leaders improve over the course of the year
42*	4.00	teacher leaders have the necessary skills to supervise

The following questions were answered only by teacher leaders.

43*	4.07	it does not bother teacher leaders to observe probationary teachers
44	4.16	teacher leaders are made to feel welcome in the classrooms of teachers they work with
45	3.80	teacher leaders feel that they capture the important aspects of teaching in their observations
46	3.14	teacher leaders feel more able to help new teachers than the principal
47	3.53	teacher leaders would like to observe and conference with probationary teachers more often
48*	3.96	working relationships with probations teachers improve over the course of the year
49	4.14	teacher leaders feel they have the skills necessary to supervise
50	3.60	teacher leaders feel they could sustain their current level of effort over time
51*	3.14	the amount of time spent by teacher leaders in in-service meetings was not excessive

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TABLE VII
Response by Item

Item	Total N	Positive Mean	1 N	1 %	2 N	2 %	3 N	3 %	4 N	4 %	5 N	5 %
1	389	2.47	105	27	89	23	119	31	61	16	15	4
2	387	2.74	71	18	88	23	125	32	76	20	27	7
3	387	2.45	92	24	104	27	129	33	48	12	14	4
4	389	2.63	95	24	80	21	112	29	76	20	26	7
5	388	2.81	73	19	76	20	124	32	81	21	34	9
6	388	2.75	73	19	87	22	124	32	73	19	31	8
7	373	2.93	60	16	72	19	122	32	92	24	37	10
8*	384	3.26	56	15	79	21	182	47	44	12	23	6
9	385	3.37	25	7	76	20	72	12	157	41	55	14
10	383	3.48	24	6	39	10	102	27	165	43	53	14
11*	388	3.52	104	27	124	32	63	16	63	16	34	9
12*	385	3.50	72	19	161	42	64	17	65	17	23	6
13	382	3.14	39	10	69	18	127	33	93	24	54	14
14*	382	3.24	54	14	134	35	83	22	71	19	40	11
15	384	3.94	11	3	25	7	45	12	199	52	104	27
16*	387	3.41	89	23	140	36	45	12	68	18	45	12
17*	385	2.77	35	9	55	14	118	21	140	36	37	10
18	371	3.19	49	13	60	16	95	26	105	28	62	17
19*	323	3.20	66	20	81	25	74	23	57	18	45	14
20	382	3.94	12	3	15	4	62	16	187	49	106	28
21*	385	3.58	80	21	160	42	67	17	58	15	20	5
22	380	2.69	93	25	90	24	58	15	121	22	18	5
23*	385	3.15	36	9	145	38	93	24	62	16	49	13
24	379	3.63	8	2	44	12	100	26	156	41	71	19
25	371	3.54	36	10	48	13	71	19	112	30	104	28
26*	368	3.10	44	12	65	18	162	44	76	21	21	6
27*	381	2.83	33	9	85	22	103	27	105	27	55	14
28*	382	3.62	93	24	152	40	61	16	49	13	27	7
29	384	2.88	19	5	20	5	55	14	69	44	121	32
30	383	3.78	15	4	37	10	64	17	170	44	97	25
31*	384	3.86	119	31	161	42	52	14	37	10	15	4
32	380	3.60	22	6	45	12	72	19	166	44	75	20
33	387	1.93	183	47	117	30	42	11	20	5	25	7
34	385	2.40	115	30	122	32	62	16	51	13	35	9
35	380	3.69	20	5	31	8	86	23	154	41	89	23
36*	378	2.98	42	11	94	25	100	27	97	26	45	12
37*	147	3.65	42	29	48	33	30	20	18	12	9	6
38	137	3.58	3	2	13	10	45	33	54	39	22	16
39	145	3.02	22	15	24	17	43	30	41	28	15	10
40	146	3.08	15	10	24	16	55	38	38	26	14	10
41	144	3.53	6	4	10	7	56	39	46	32	26	18
42*	145	4.00	62	43	45	31	24	17	4	3	10	7
43*	57	4.07	22	39	22	39	9	16	3	5	1	2
44	58	4.16	0	0	5	9	6	10	22	38	25	43
45	54	3.80	0	0	1	2	18	33	26	48	9	17
46	56	3.14	5	9	8	14	20	36	20	36	3	5
47	57	3.53	1	2	7	12	19	33	21	37	9	16
48*	55	3.96	28	33	22	40	11	20	3	6	1	2

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49	58	4.14	2	3	0	0	6	10	30	52	20	35
50	55	3.60	2	4	10	18	9	16	2	38	13	24
51*	58	3.14	5	9	21	36	15	26	11	19	61	10

*Questions phrased in the negative. Values reversed to calculate positive mean.

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TABLE VIII

Response by Item by Category

(Rounded to the nearest percent; differences in total N from missing values.)

Item	Source	1		2		3		4		5	
		N	%	N	%	N	%	N	%	N	%
1	elementary	48	21	48	21	81	35	39	17	15	7
	junior high	16	29	20	36	15	27	5	9	0	0
	high school	41	41	21	21	22	22	17	17	0	0
	leader	6	11	11	20	20	37	13	24	4	7
	specialist	46	33	31	23	44	32	15	11	2	1
	none	53	27	47	24	55	28	33	17	9	5
	1-3 yrs	9	8	25	23	43	39	28	26	4	4
	4-10 yrs	35	29	27	22	37	30	15	12	9	7
	over 10 yrs	61	39	37	24	39	25	18	12	2	1
2	elementary	28	12	52	23	79	35	50	22	20	9
	junior high	14	25	16	29	18	32	6	11	2	4
	high school	29	29	20	20	27	27	20	20	5	5
	leader	5	9	3	6	22	41	14	26	10	19
	specialist	29	21	35	26	43	31	26	19	4	3
	none	37	19	50	26	60	31	36	18	13	7
	1-3 yrs	11	10	23	21	45	41	22	20	8	7
	4-10 yrs	18	15	28	23	39	32	29	24	8	7
	over 10 yrs	42	27	37	24	41	26	25	16	11	7
3	elementary	43	19	55	24	92	40	27	12	13	6
	junior high	13	23	21	38	15	27	7	13	0	0
	high school	36	36	28	28	22	22	14	14	1	1
	leader	5	9	10	19	22	41	14	26	3	6
	specialist	43	31	34	25	48	35	10	7	2	2
	none	44	22	60	31	59	30	24	12	9	5
	1-3 yrs	8	7	31	29	45	42	18	17	6	6
	4-10 yrs	27	22	35	29	41	33	16	13	4	3
	over 10 yrs	57	37	38	24	43	28	14	9	4	3
4	elementary	41	18	47	20	70	30	51	22	22	10
	junior high	18	32	10	18	14	25	12	21	2	4
	high school	36	36	22	22	28	28	13	13	2	2
	leader	4	7	6	11	21	39	19	35	4	7
	specialist	41	30	28	20	37	27	23	17	9	7
	none	50	25	46	23	54	27	34	17	13	7
	1-3 yrs	7	6	24	22	43	39	27	25	8	7
	4-10 yrs	29	24	28	23	36	29	21	17	9	7
	over 10 yrs	59	38	28	18	33	21	28	18	9	6

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		N	%	N	%	N	%	N	%	N	%
5	elementary	28	12	45	20	79	34	57	25	21	9
	junior high	15	27	8	14	17	30	11	20	5	9
	high school	30	30	23	23	27	27	13	13	8	8
	leader	4	7	1	2	23	43	16	30	10	19
	specialist	27	20	31	23	46	33	24	17	10	7
	none	42	21	44	22	55	28	41	21	14	7
	1-3 yrs	12	11	23	21	35	32	30	28	9	8
	4-10 yrs	25	21	22	18	41	34	22	18	12	10
	over 10 yrs	36	23	31	20	48	31	29	19	13	8
6	elementary	22	10	56	24	80	35	51	22	21	9
	junior high	14	25	11	20	18	32	8	14	5	9
	high school	37	37	20	20	25	25	14	14	5	5
	leader	4	7	5	9	22	41	16	30	7	13
	specialist	60	22	30	22	43	31	27	20	8	6
	none	39	20	52	27	59	30	30	15	16	8
	1-3 yrs	8	7	27	25	38	35	29	27	7	6
	4-10 yrs	21	17	31	25	40	33	18	15	12	10
	over 10 yrs	44	28	29	19	46	29	26	17	12	8
7	elementary	22	10	39	17	81	36	57	25	28	12
	junior high	8	14	8	14	20	36	13	23	7	13
	high school	30	30	24	24	21	21	22	22	2	2
	leader	6	11	9	17	17	32	14	26	8	15
	specialist	23	17	20	15	51	37	31	23	12	9
	none	31	16	43	22	54	28	47	25	17	9
	1-3 yrs	7	7	24	22	35	32	28	26	14	13
	4-10 yrs	22	19	22	19	38	32	26	22	10	9
	over 10 yrs	31	20	26	17	49	31	38	24	13	8
8*	elementary	32	14	48	21	104	46	31	14	12	5
	junior high	11	20	13	23	22	39	7	13	3	5
	high school	13	13	18	18	56	56	6	6	8	8
	leader	13	24	15	28	23	43	1	2	2	4
	specialist	16	12	27	20	68	50	18	13	8	6
	none	27	14	37	19	91	47	25	13	13	7
	1-3 yrs	19	18	22	20	48	44	17	16	2	2
	4-10 yrs	14	12	26	22	57	48	14	12	9	8
	over 10 yrs	23	15	31	20	77	49	13	8	12	8
9	elementary	17	7	41	18	40	18	96	42	35	15
	junior high	4	8	8	15	10	18	22	40	11	20
	high school	4	4	27	27	22	22	39	39	9	9

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		N	%	N	%	N	%	N	%	N	%
	leader	3	6	6	11	4	8	24	45	16	30
	specialist	12	9	23	17	28	20	60	44	14	10
	none	10	5	47	24	40	21	73	37	25	13
	1-3 yrs	5	5	17	16	21	19	54	50	11	10
	4-10 yrs	9	7	28	23	21	17	46	37	19	15
	over 10 yrs	11	7	31	20	30	20	57	37	25	16
10	elementary	4	2	15	7	62	27	105	47	40	18
	junior high	4	7	8	15	18	32	20	36	6	11
	high school	16	16	16	16	22	22	40	40	7	7
	leader	4	8	3	6	10	19	25	48	10	19
	specialist	8	6	13	10	38	28	63	46	15	11
	none	12	6	23	12	54	28	77	40	28	14
	1-3 yrs	2	2	9	8	31	29	46	43	19	18
	4-10 yrs	8	7	12	10	27	22	60	50	14	12
	over 10 yrs	14	9	18	12	44	28	59	38	20	13
11*	elementary	81	36	74	32	33	14	32	14	10	4
	junior high	7	13	21	38	14	25	11	20	3	5
	high school	16	16	29	29	16	16	20	20	20	20
	leader	21	40	16	30	7	13	7	13	2	4
	specialist	35	25	51	37	22	16	19	14	11	8
	none	48	24	57	29	31	17	37	18	21	11
	1-3 yrs	35	32	33	30	19	17	18	17	4	4
	4-10 yrs	39	32	36	30	17	14	22	18	8	7
	over 10 yrs	30	19	55	35	27	17	23	15	22	14
12*	elementary	43	19	95	42	41	18	38	17	11	5
	junior high	9	16	25	46	12	22	4	7	5	9
	high school	20	20	40	40	11	11	23	23	7	7
	leader	14	26	22	41	8	15	6	11	4	7
	specialist	28	21	63	46	17	13	21	15	7	5
	none	30	15	76	39	39	20	38	20	12	6
	1-3 yrs	21	19	53	49	24	22	9	8	2	2
	4-10 yrs	24	20	53	44	15	12	21	17	8	7
	over 10 yrs	27	17	55	36	25	16	35	23	13	8
13	elementary	20	9	43	19	86	38	51	23	27	12
	junior high	6	11	15	27	15	27	12	22	7	13
	high school	13	13	11	11	26	26	30	30	20	20
	leader	4	7	8	15	13	25	17	32	11	21
	specialist	15	11	23	17	54	39	22	16	23	17
	none	20	10	38	20	60	31	54	28	20	10

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		N	%	N	%	N	%	N	%	N	%
	1-3 yrs	4	4	13	12	45	43	33	31	11	10
	4-10 yrs	12	10	25	21	41	34	29	24	14	12
	over 10 yrs	23	15	31	20	41	27	31	20	29	19
14*	elementary	30	13	87	38	52	23	38	17	20	9
	junior high	9	16	15	27	12	21	13	23	7	13
	high school	15	15	32	32	19	19	20	20	13	13
	leader	10	20	19	37	9	18	9	18	4	8
	specialist	25	18	42	31	28	20	28	20	14	10
	none	19	10	73	38	46	24	34	18	22	11
	1-3 yrs	15	14	45	43	25	24	15	14	6	6
	4-10 yrs	18	15	50	41	24	20	17	14	13	11
	over 10 yrs	21	14	39	25	34	22	39	25	21	14
15	elementary	6	3	17	8	31	14	124	55	49	22
	junior high	3	5	3	5	6	11	24	43	20	36
	high school	2	2	5	5	8	8	51	51	35	35
	leader	0	0	1	2	1	2	26	50	24	46
	specialist	6	4	11	8	18	13	69	50	33	24
	none	5	3	13	7	26	13	104	53	47	24
	1-3 yrs	4	4	10	9	18	17	56	52	20	19
	4-10 yrs	4	3	7	6	14	12	68	56	29	24
	over 10 yrs	3	2	8	5	13	8	75	49	55	36
16*	elementary	58	25	92	40	22	10	37	16	22	10
	junior high	10	18	18	32	7	13	9	16	12	21
	high school	21	21	30	30	16	16	22	22	11	11
	leader	16	30	18	33	4	7	14	26	2	4
	specialist	33	24	58	42	14	10	20	15	12	9
	none	40	20	64	33	27	14	34	17	31	16
	1-3 yrs	12	11	36	33	16	15	23	21	21	19
	4-10 yrs	22	18	48	39	14	11	25	20	14	11
	over 10 yrs	55	35	56	36	15	10	20	13	10	6
17*	elementary	18	8	27	12	79	34	85	37	21	9
	junior	8	15	9	16	9	16	22	40	7	13
	high school	9	9	19	19	30	30	33	33	9	9
	leader	5	9	8	15	10	19	24	45	6	11
	specialist	11	8	25	18	27	20	52	38	22	16
	none	19	10	22	11	81	42	64	33	9	5
	1-3 yrs	5	5	8	8	41	38	44	41	9	8
	4-10 yrs	13	11	20	16	33	27	46	38	10	8
	over 10 yrs	17	11	27	17	44	28	50	32	18	12

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		N	%	N	%	N	%	N	%	N	%
18	elementary	31	14	34	16	67	31	60	27	27	12
	junior high	8	15	12	23	10	19	13	25	9	17
	high school	10	10	14	14	18	18	32	32	26	26
	leader	7	14	12	23	11	21	14	27	8	15
	specialist	20	15	18	13	28	21	48	36	21	16
	none	22	12	30	16	56	30	43	23	33	18
	1-3 yrs	8	8	23	22	42	40	26	25	5	5
	4-10 yrs	17	14	17	14	30	25	34	29	20	17
	over 10 yrs	24	16	20	13	23	15	45	30	37	25
19*	elementary	38	20	47	25	45	24	30	16	26	14
	junior high	11	22	14	29	9	18	8	16	7	14
	high school	17	19	20	23	20	23	19	22	12	14
	leader	14	33	11	26	5	12	7	17	5	12
	specialist	17	15	28	25	29	25	20	18	20	18
	none	35	21	42	25	40	21	30	18	20	12
	1-3 yrs	17	18	29	31	23	24	16	17	10	11
	4-10 yrs	16	16	29	29	24	24	16	16	14	14
	over 10 yrs	33	26	23	18	27	21	25	19	21	16
20	elementary	3	1	4	2	34	15	111	49	75	33
	junior high	2	4	2	4	6	11	30	55	15	27
	high school	7	7	9	9	22	22	46	46	16	16
	leader	2	4	1	2	1	2	22	12	27	51
	specialist	5	4	8	6	28	20	68	49	29	21
	none	5	3	6	4	33	17	97	51	50	26
	1-3 yrs	3	3	1	1	17	16	54	50	33	31
	4-10 yrs	3	3	6	5	23	19	54	45	34	28
	over 10 yrs	6	4	8	5	22	14	79	51	39	25
21*	elementary	45	20	93	41	43	19	36	16	11	5
	junior high	12	21	22	39	11	20	7	13	4	7
	high school	23	23	45	45	13	13	15	15	5	5
	leader	19	36	23	43	5	9	4	8	2	4
	specialist	29	21	52	38	21	15	26	19	9	7
	none	32	16	85	44	41	21	28	14	9	5
	1-3 yrs	17	16	50	46	21	19	17	16	3	3
	4-10 yrs	22	18	52	43	21	18	19	16	6	5
	over 10 yrs	41	26	58	37	25	16	22	14	11	7
22	elementary	55	24	53	24	37	16	66	29	14	6
	junior high	13	23	13	23	7	13	21	38	2	4
	high school	25	25	24	24	14	14	34	34	2	2

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		N	%	N	%	N	%	N	%	N	%
	leader	7	13	13	24	6	11	25	46	3	6
	specialist	42	31	28	21	21	16	38	28	6	4
	none	44	23	49	56	31	16	58	30	9	5
	1-3 yrs	27	25	25	23	20	19	30	28	5	5
	4-10 yrs	27	23	29	25	16	14	37	32	8	7
	over 10 yrs	39	25	36	23	22	14	54	35	5	3
23*	elementary	24	11	81	36	49	22	37	16	37	16
	junior high	4	7	23	41	20	36	6	11	3	5
	high school	8	8	41	41	24	24	19	19	9	9
	leader	8	15	27	50	11	20	4	7	4	7
	specialist	11	8	47	35	33	24	24	18	21	15
	none	17	9	71	36	49	25	34	17	24	12
	1-3 yrs	10	9	44	41	29	27	16	15	9	8
	4-10 yrs	8	7	41	34	33	27	22	18	17	14
	over 10 yrs	18	12	60	39	31	20	24	15	23	15
24	elementary	4	2	25	11	64	28	84	37	49	22
	junior high	2	4	12	22	16	29	18	33	7	13
	high school	2	2	7	7	20	20	54	55	15	15
	leader	2	4	6	11	9	17	21	39	16	30
	specialist	4	3	23	17	33	25	54	40	20	15
	none	2	1	15	8	58	30	81	42	35	18
	1-3 yrs	2	2	7	7	43	42	38	37	12	12
	4-10 yrs	0	0	15	12	28	23	51	42	29	24
	over 10 yrs	6	4	22	14	29	19	67	44	30	20
25	elementary	24	11	28	13	46	21	65	30	55	25
	junior high	3	6	6	11	16	29	16	29	14	26
	high school	9	9	14	14	9	9	31	32	35	36
	leader	6	12	6	12	6	12	17	33	17	33
	specialist	15	12	12	9	24	18	42	32	28	29
	none	15	8	30	16	41	22	53	28	49	26
	1-3 yrs	10	10	13	12	27	26	29	28	26	25
	4-10 yrs	14	12	12	10	19	17	41	36	29	25
	over 10 yrs	12	8	23	15	25	17	42	28	49	33
26*	elementary	34	16	38	18	97	45	37	17	11	5
	junior high	4	7	9	16	23	42	14	26	5	9
	high school	6	6	18	19	42	44	25	26	5	5
	leader	10	20	13	26	15	29	11	22	2	4
	specialist	14	11	20	16	62	48	24	19	8	6
	none	20	11	32	17	85	45	41	22	11	6

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		N	%	N	%	N	%	N	%	N	%
	1-3 yrs	13	12	21	20	53	50	18	17	1	1
	4-10 yrs	16	14	22	20	43	38	20	18	11	10
	over 10 yrs	15	10	22	15	66	44	38	25	9	6
27*	elementary	27	12	60	27	61	27	50	22	27	12
	junior high	4	7	10	18	18	32	19	34	5	9
	high school	2	2	15	15	24	24	36	36	23	23
	leader	7	13	17	32	7	13	20	37	3	6
	specialist	9	7	30	22	33	24	39	29	25	18
	none	17	9	38	20	63	33	46	24	27	14
	1-3 yrs	10	9	30	28	33	31	25	24	8	8
	4-10 yrs	14	12	27	23	24	20	34	28	21	18
	over 10 yrs	9	6	28	18	46	30	46	30	26	17
28*	elementary	72	32	92	41	26	12	29	13	8	4
	junior high	9	16	20	36	16	29	6	11	5	9
	high school	12	12	40	40	19	19	14	14	14	14
	leader	22	41	19	35	7	13	5	9	1	2
	specialist	27	20	55	41	19	14	20	15	13	10
	none	44	23	78	41	35	18	24	12	13	7
	1-3 yrs	27	25	47	44	19	18	11	10	3	3
	4-10 yrs	36	30	43	35	17	14	16	13	10	8
	over 10 yrs	30	20	62	41	25	16	22	14	14	9
29	elementary	8	4	7	3	30	13	94	41	89	39
	junior high	1	2	2	4	8	14	31	55	14	25
	high school	10	10	11	11	17	17	44	44	18	18
	leader	2	4	0	0	3	6	21	39	28	52
	specialist	5	4	7	5	20	15	64	47	40	29
	none	12	6	13	7	32	17	84	43	53	27
	1-3 yrs	3	3	0	0	19	18	50	46	36	33
	4-10 yrs	5	4	6	5	10	8	56	46	44	36
	over 10 yrs	11	7	14	9	26	17	63	41	41	27
30	elementary	8	4	18	8	28	12	103	45	70	31
	junior high	1	2	3	5	16	29	22	39	14	25
	high school	6	6	16	16	20	20	45	45	13	13
	leader	1	2	1	2	2	4	29	54	21	39
	specialist	5	4	14	10	20	15	62	46	34	26
	none	9	5	22	11	42	22	79	41	42	22
	1-3 yrs	2	2	4	4	23	21	54	50	25	23
	4-10 yrs	5	4	14	12	14	12	50	41	39	32
	over 10 yrs	8	5	19	12	27	18	66	43	33	22

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		N	%	N	%	N	%	N	%	N	%
31*	elementary	87	39	96	42	25	11	16	7	4	2
	junior high	9	16	26	46	10	18	8	14	3	5
	high school	23	23	39	39	17	17	13	13	8	8
	leader	24	44	25	46	1	2	3	6	1	2
	specialist	44	32	58	42	14	10	16	12	5	4
	none	51	27	78	40	37	19	18	9	9	5
	1-3 yrs	33	31	49	46	16	15	6	6	3	3
	4-10 yrs	43	35	50	41	12	10	12	10	5	4
	over 10 yrs	43	28	62	40	24	16	19	12	7	5
32	elementary	10	4	28	12	41	18	90	40	56	25
	junior high	4	7	2	4	14	26	28	51	7	13
	high school	8	8	15	15	17	17	48	48	12	12
	leader	3	6	0	0	7	13	28	53	15	28
	specialist	6	4	18	13	26	19	61	45	24	18
	none	13	7	27	14	39	20	77	40	36	19
	1-3 yrs	2	2	7	7	26	24	47	44	26	24
	4-10 yrs	5	4	18	15	23	19	54	45	20	17
	over 10 yrs	15	10	20	13	23	15	65	43	29	19
33	elementary	104	45	74	32	24	10	13	6	16	7
	junior high	27	48	14	25	9	16	1	2	5	9
	high school	52	52	29	29	9	9	6	6	4	4
	leader	18	33	18	33	10	19	2	4	6	11
	specialist	75	55	35	26	11	8	7	5	9	7
	none	90	46	64	33	21	11	11	6	10	6
	1-3 yrs	44	41	42	39	15	14	3	3	4	4
	4-10 yrs	52	42	37	30	14	11	8	7	12	10
	over 10 yrs	87	56	38	24	13	8	9	6	9	6
34	elementary	73	32	75	33	33	14	27	12	22	10
	junior high	17	30	14	25	11	20	9	16	5	9
	high school	25	25	33	33	18	18	15	15	8	8
	leader	18	33	17	32	7	13	7	13	5	9
	specialist	33	24	40	29	24	18	18	13	21	15
	none	64	33	65	33	31	16	26	13	9	5
	1-3 yrs	38	35	35	32	18	17	14	13	3	3
	4-10 yrs	33	27	44	36	14	12	16	13	15	12
	over 10 yrs	44	28	43	28	30	19	21	14	17	11
35	elementary	10	4	14	6	46	20	82	36	73	32
	junior high	3	5	5	9	18	32	22	39	14	8
	high school	7	7	12	12	22	22	50	50	8	8

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		N	%	N	%	N	%	N	%	N	%
	leader	2	4	2	4	3	6	23	43	23	43
	specialist	9	7	14	10	24	18	61	45	28	21
	none	9	5	15	8	59	31	70	37	38	20
	1-3 yrs	2	2	5	5	35	33	39	37	25	24
	4-10 yrs	3	3	11	9	24	20	53	44	29	24
	over 10 yrs	15	10	15	10	27	18	62	40	35	23
36*	elementary	24	11	56	25	64	28	53	24	29	13
	junior high	5	9	18	33	16	30	11	20	4	7
	high school	13	13	20	20	20	20	33	33	12	12
	leader	4	7	18	33	12	22	12	22	8	15
	specialist	13	10	30	23	42	32	30	23	18	14
	none	25	13	46	24	46	24	55	29	19	10
	1-3 yrs	12	11	25	23	34	32	26	24	10	9
	4-10 yrs	10	8	32	27	30	25	33	28	15	13
	over 10 yrs	20	13	37	25	36	24	38	25	20	13

The following questions were answered only by probationary teachers.

37*	elementary	29	29	30	30	21	21	13	13	8	8
	junior high	8	30	11	41	4	15	3	11	1	4
	high school	5	26	7	37	5	26	2	11	0	0
	1-3 yrs	29	30	29	30	23	24	12	12	4	4
	4-10 yrs	12	32	12	32	6	16	4	11	4	11
	over 10 yrs	1	8	7	58	1	8	2	17	1	8
38	elementary	3	3	11	12	29	31	38	40	14	15
	junior high	0	0	1	4	9	38	7	29	7	29
	high school	0	0	1	6	7	39	9	50	1	6
	1-3 yrs	1	1	8	9	32	35	34	37	16	18
	4-10 yrs	2	6	4	11	10	28	16	44	4	11
	over 10 yrs	0	0	1	10	3	30	4	40	2	20
39	elementary	17	17	17	17	29	29	28	28	8	8
	junior high	2	7	5	19	8	31	6	23	5	19
	high school	3	15	2	10	6	30	7	35	2	10
	1-3 yrs	11	12	12	13	30	31	32	33	11	12
	4-0 yrs	9	24	9	24	12	32	4	11	4	11
	over 10 yrs	2	18	3	27	1	9	5	46	0	0
40	elementary	12	12	15	15	34	34	29	29	10	10
	junior high	2	7	6	23	14	54	3	12	1	4
	high school	1	5	3	15	7	35	6	30	3	15

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		N	%	N	%	N	%	N	%	N	%
	1-3 yrs	10	10	17	17	33	34	27	28	10	10
	4-10 yrs	5	13	5	13	16	41	10	26	3	8
	over 10 yrs	0	0	2	20	6	60	1	10	1	10
41	elementary	4	4	5	5	39	40	27	28	22	23
	junior high	1	4	3	12	11	42	8	31	3	12
	high school	1	5	2	10	6	29	11	52	1	5
	1-3 yrs	2	2	5	5	34	36	34	36	20	21
	4-10 yrs	4	11	5	13	15	40	9	24	5	13
	over 10 yrs	0	0	0	0	7	64	3	27	1	9
42*	elementary	47	48	31	32	13	13	2	2	5	5
	junior high	10	39	8	31	4	15	1	4	3	12
	high school	5	24	6	29	7	33	1	5	2	10
	1-3 yrs	49	51	27	28	14	15	3	3	3	3
	4-10 yrs	11	29	12	32	6	24	0	0	6	16
	over 10 yrs	2	18	6	55	1	9	1	9	1	9

The following questions were answered only by teacher leaders.

43*	elementary	12	36	13	39	6	18	2	6	0	0
	junior high	6	60	3	30	1	10	0	0	0	0
	high school	4	29	6	43	2	14	1	7	1	7
	1-3 yrs	1	100	0	0	0	0	0	0	0	0
	4-10 yrs	13	52	8	32	4	16	0	0	0	0
	over 10 yrs	8	26	14	45	5	16	3	10	1	3
44	elementary	0	0	2	6	3	9	15	46	13	39
	junior high	0	0	1	10	0	0	1	10	8	80
	high school	0	0	2	13	3	20	6	40	4	27
	1-3 yrs	0	0	0	0	0	0	0	0	1	100
	4-10 yrs	0	0	1	4	0	0	12	48	12	48
	over 10 yrs	0	0	4	13	6	19	10	31	12	38
45	elementary	0	0	1	3	9	28	16	50	6	19
	junior high	0	0	0	0	3	30	4	40	3	30
	high school	0	0	0	0	6	50	6	50	0	0
	1-3 yrs	0	0	0	0	0	0	1	100	0	0
	4-10 yrs	0	0	1	4	7	28	12	48	5	20
	over 10 yrs	0	0	0	0	11	39	13	46	4	14
46	elementary	4	13	7	22	13	41	6	19	2	6
	junior high	0	0	0	0	5	50	5	50	0	0
	high school	1	7	1	7	2	14	9	64	1	7
	1-3 yrs	0	0	0	0	1	100	0	0	0	0
	4-10 yrs	3	13	4	17	11	46	5	21	1	4
	over 10 yrs	2	7	4	13	8	26	15	48	2	7

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		N	%	N	%	N	%	N	%	N	%
47	elementary	0	0	3	9	12	37	13	39	5	15
	junior high	0	0	2	20	1	10	4	40	3	30
	high school	1	7	2	14	6	43	4	29	1	7
	1-3 yrs	0	0	0	0	0	0	0	0	1	100
	4-10 yrs	0	0	2	8	7	28	11	44	5	20
	over 10 yrs	1	3	5	16	12	39	10	32	3	10
48*	elementary	11	34	15	47	4	16	1	3	1	3
	junior high	4	40	1	10	4	40	1	10	0	0
	high school	3	23	6	46	3	23	1	7	0	0
	1-3 yrs	0	0	1	100	0	0	0	0	0	0
	4-10 yrs	9	36	9	36	5	20	1	4	1	4
	over 10 yrs	9	31	12	41	6	21	2	7	0	0
49	elementary	0	0	1	3	3	9	18	55	11	33
	junior high	0	0	0	0	1	10	4	40	5	50
	high school	0	0	1	7	2	13	8	53	4	27
	1-3 yrs	0	0	0	0	0	0	0	0	1	100
	4-10 yrs	0	0	1	4	3	12	12	48	9	36
	over 10 yrs	0	0	1	3	3	9	15	56	10	31
50	elementary	1	3	7	23	7	23	9	29	7	23
	junior high	0	0	2	20	1	10	3	30	4	40
	high school	1	7	1	7	1	7	9	64	2	14
	1-3 yrs	0	0	0	0	0	0	1	100	0	0
	4-10 yrs	1	5	6	27	4	18	5	23	6	27
	over 10 yrs	1	3	4	13	5	16	15	47	7	22
51*	elementary	5	15	12	36	10	30	4	12	2	6
	junior high	0	0	5	50	2	20	1	10	2	20
	high school	0	0	4	27	3	20	6	40	2	13
	1-3 yrs	0	0	1	100	0	0	0	0	0	0
	4-10 yrs	4	16	6	24	10	40	5	20	0	0
	over 10 yrs	1	3	14	44	5	16	6	19	6	19

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